MEMORANDUM

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The File

Margaret Chen, Environmental Analyst, DEP/NERO/BWSC/SMP

Stephen Roberson, Environmental Analyst, DEP/NERO/BWSC/SMP 557
Stephen Johnson, Section Chief, DEP/NERO/BWSC/SMP Through:

John Fitzgerald, Deputy Regional Engineer, DEP/NERO BWSC/SMP

February 10, 1997 (Revised February 20, 1997) Date:

MIDDLETON - Adhesive Manufacturer, School Street Subject:

Release Tracking No. 3-0168

Site Status Review and Risk Reduction Proposal

February 14, 1997 Meeting

The purpose of this memorandum is to provide a brief summary of the conditions and status of the above-referenced site and to propose risk reduction measures. This site is currently in Phase II of the MCP process.

Site Conditions and Site Status

To:

From:

The 40 School Street property was the site of an adhesive manufacturing facility from around 1970 through the early 1990s. facility is currently abandoned. Activities associated with adhesive manufacturing caused a release of volatile organic compounds (VOCs), particularly toluene and chlorinated solvents, to the soil groundwater. This property was also impacted by a release of gasoline from a leaking underground storage tank (UST).

The subject property is approximately 3.2 acres with the northwest one-third of the property being covered by wetlands associated with Boston Brook, which abuts the property to the northwest. Groundwater flow is north-northwest, toward the wetlands and Boston Brook. Depth to groundwater at the site ranges from approximately 2 to 9.5 feet below grade. Bedrock at the site is encountered at a depth of 19 to 29 feet.

All properties in this area were supplied by private drinking water supply wells until the summer of 1996 when the Town of Middleton installed a water line down School Street. The purpose of this water line was predominantly to connect the 34 School Street property to municipal water due to the contamination of its private well by VOCs. Sampling of drinking water supply wells in the vicinity of the site in three comprehensive sampling rounds conducted in 1987, 1989, and 1993 revealed contaminant concentrations in only the sample collected from the 34 School Street residence, which abuts the subject property to the west. The properties in this area are serviced by private septic systems.

In October of 1996, DEP obtained groundwater samples from monitoring wells at the site to determine the current groundwater quality. The main contaminants detected in the groundwater samples and their highest detected concentrations are presented in the table below. The higher concentrations of benzene, toluene, ethylbenzene and total xylenes (BTEX compounds) were found primarily in the overburden wells and the higher concentrations of chlorinated compounds were found in the bedrock wells.

MIDDLETON - Adhesive Manufacturer Page 2

The data from this groundwater sampling round was compared to historical contaminant levels and the MCP Method 1 groundwater cleanup standards. It is evident from this comparison that the historical levels for most contaminants were above both Method 1 GW-1 and GW-2 cleanup standards. However, the present levels of most contaminants show that the groundwater quality has improved, and that the contaminant levels for some compounds have approached or fallen below the cleanup standards. It is important to point out that although the cleanup of this site previously would have been required to meet GW-1 standards due to its location within an area with only private wells, this standard may no longer apply since the installation of the water line down School Street in the summer of 1996.

Compound	Maximum Historical Levels	Maximum Present Levels	GW-1 Standards	GW-2 Standards
Benzene	3,400	76	5	2,000
Toluene	65,000	2,600	1,000	6,000
Ethylbenzene	4,900	42	700	30,000
Total Xylenes	38,510	2,600	10,000	6,000
Tetrachloroethene	13	26	5	3,000
Trichloroethene	2,100	880	5	300
1,1,1-Trichloroethane	1,570	6.4	200	4,000
1,1-Dichloroethane	492	89	70	9,000
cis-1,2-Dichloroethene	2,000	2,900	70	30,000
1,2-Dichloroethene	72	16	7	1
Vinyl Chloride	1,400	65	2	2
Chloroethane	1,200	30	-	-

Notes:

Historical levels are from groundwater sampling rounds collected in 1987-1988.

Present levels are from the groundwater sampling round conducted on October 29, 1996.

All levels are presented in micrograms per liter (ug/l).

The site has not been occupied since the manufacturing facility ceased operations in 1992, and is considered to be abandoned. DEP had issued the potentially responsible party (PRP), American Glue & Resin, Inc., a Tier I Transition Permit in 1994, but the PRP had rejected it, citing the company's lack of financial ability to conduct cleanup actions since they are no longer a viable company.

Risk Reduction Options

Given that the Town of Middleton has installed a water line down School Street, the concern that the contamination at the site would impact a nearby residential private well and render it unusable, leaving the residence without a water supply, has diminished. In light of this, the performance of some limited response actions at the site may reduce and/or remove threats of releases and/or potential source areas, allowing DEP to downgrade the priority of the site so that future direct DEP oversight

MIDDLETON - Adhesive Manufacturer Page 3

would not be required. Notwithstanding, this site may be able to be downgraded without DEP expending state funds to conduct these response actions.

The following is a list of actions that may be taken at the site to reduce risks posed by existing site conditions:

- Two abandoned USTs southwest of the manufacturing building (one 2,000-gallon fuel oil and one 5,000-gallon toluene) should be emptied and/or removed. While the tanks are believed to be in good condition, they still contain some residual product, and thus represent a threat of release.
- Two trailers containing drums of wastewater are parked over a catch basin east of the manufacturing building. In addition, a total of probably over 200 drums (also containing wastewater) are located within the storage and manufacturing buildings on site. Since some of the drums are in poor condition, the drums and their contents should be removed to prevent a release from occurring. [Note: According to John Keating of DEP's Bureau of Waste Prevention, the wastewater is not considered to be a hazardous waste.]
- 3) Various small-sized containers of polymers, caustics, acids, and other compounds still remain in the manufacturing building. These containers of hazardous materials should be removed and properly disposed to prevent any future threat of release.

There are also five additional areas that were identified during the Phase II investigation as potential source areas where contamination might have been introduced to the environment:

- 1) cesspool connected to the bathroom of the manufacturing building;
- 2) abandoned production well in the main building;
- 3) septic tank and catch basins in loading area;
- 4) sand filtration system toward rear of property;
- 5) septic outbreak that borders the wetlands.

Some or all of these areas should be evaluated to determine whether they continue to contribute to the contamination at the site. In particular, the cesspool and the catch basins (especially CB#3) should be evaluated, since historical sampling data from these locations showed significant WOC contamination.

Although the representatives of the PRP have indicated their willingness to cooperate with DEP to address the need to conduct response actions at the site, such as obtaining pricing for and conducting the removal and disposal of the USTs and drums, they have not followed through with these actions. However, they have orally offered to provide some limited capital to fund the response actions should DEP provide them with assistance.

February 14, 1997 Meeting

On February 14, 1997, a meeting was held at DEP's Northeast Regional

MIDDLETON - Adhesive manufacturer Page 4

Office to review the status of this site and to discuss the need to conduct response actions at this site. John Fitzgerald, Stephen Roberson and Margaret Chen were present at this meeting. As a result of this meeting, the following response actions will be taken:

Empty Residual Product from Underground Storage Tanks
The residual product in the two abandoned underground storage tanks
will be removed. This is expected to accomplish the goal of risk
reduction at a lower cost than would be incurred through removal of
the tanks. The tanks will be gauged prior to the work in order to
establish how much product remains in the tanks.

Remove and Dispose of Wastewater and Drums

The wastewater contained in drums in the trailers in the loading area and in the storage and manufacturing buildings will be consolidated and tested for characterization and disposal. The drums will also be removed from site. Prior to implementing this task, the writer will contact the PRP to confirm that the drums only contain industrial wastewater. The representatives of the PRP will also be asked the reason for the water being drummed if the contents are just industrial wastewater.

Remove and Dispose of Containers of Hazardous Materials
Any containers of hazardous materials still remaining in the manufacturing building will be removed and properly disposed.

Evaluate Tom Sawyer Water Usage

The writer will contact the Tom Sawyer Beverage Company, which abuts the site property, and establish the nature of water usage there (specifically, whether the water from their private well is used in manufacturing soft drink syrups produced there). The writer will also ascertain whether the beverage company has performed any regular sampling of their well over the years, and, if so, what the results of the sampling are. This will help ensure that the water at the beverage company has not been impacted by the conditions at the site.

As previously stated, there are five additional areas that were identified during the Phase II investigation as potential source areas where contamination might have been introduced to the environment. Based on the data from the groundwater sampling round conducted by DEP in October of 1996, the groundwater quality at the site has not worsened as a result of the presence of these potential source areas. In addition, operations at the site ceased in 1992. Given these factors, it is not likely that additional contamination has been introduced to the environment via these pathways; therefore, response actions to address these areas are not warranted at this time.

Given that the PRP representatives have expressed that they have limited financial capabilities but appeared to want to cooperate with DEP, DEP will prepare a detailed plan of the proposed risk reduction measures and present the plan to the PRP. The PRP will then be given the option to perform the work. If the PRP decides that it cannot do the work, DEP will put the work out to bid to state contractors and seek to recover costs from the PRP.

MIDDLETON - Adhesive manufacturer Page 5

The above-described work plan will be developed within the next few weeks so that the implementation of the work can begin this spring. Once these risk reduction measures are completed, DEP can downgrade this site, and any future remedial actions can continue under the oversight of a Licensed Site Professional.

Projected Budget

The cost for the work outlined above is estimated to be about \$25,000-\$50,000. This cost would include the removal and disposal of the product in the USTs, the characterization and disposal of the wastewater in drums, the removal and disposal of the 55-gallon drums in the trailers and in the buildings, and the removal and disposal of any hazardous material containers in the buildings. Given that the total number of drums and their contents are somewhat uncertain, the cost for drum removal might be higher than estimated. Accordingly, the proposed drum removal actions and cost estimates will be reviewed with the NERO/BWSC Deputy Regional Engineer after additional information on the drums has been obtained.